



CITY OF DURHAM | DURHAM COUNTY  
NORTH CAROLINA



ZONING CHANGE REPORT

Meeting Date: December 1, 2014

Table A. Summary				
Application Summary				
Case Number		Z1300035	Jurisdiction	City
Applicant		Regions Development, LLC	Submittal Date	December 20, 2013
Reference Name		Grandin Trace	Site Acreage	20.05
Location		Herndon Road and Grandale Drive, south of Barbee Road		
PIN(s)	0728-03-22-1015, -1636 (p/o), -0268 (p/o), -21-0884, -23-4279, -2381, -4180, -13-8047 (p/o)			
Request				
Proposed Zoning		Planned Development Residential 3.322 (PDR 3.322) and Residential Rural with a development plan (RR(D))	Proposal	54 single-family residential units
Site Characteristics				
Development Tier		Suburban Tier		
Land Use Designation		Low Density Residential (4 DU/Ac. or less)		
Existing Zoning		Residential Rural (RR)		
Existing Use		Vacant, agricultural, and single-family residential		
Overlay		F/J-B	Drainage Basin	Jordan Lake
River Basin		Cape Fear	Stream Basin	Northeast Creek, Crooked Creek
Determination/Recommendation/Comments				
Staff	Staff determines that this request is consistent with the <i>Comprehensive Plan</i> and application policies and ordinances.			
Planning Commission	Recommend approval, 10-0 on October 14, 2014. The Planning Commission finds that the ordinance request is consistent with the adopted Comprehensive Plan. The Commission believes the request is reasonable and in the public interest and recommends approval based on comments received at the public hearing and the information in the staff report.			
DOST	No comments			
BPAC	No comments			

## A. Summary

This is a request to change the zoning map designation of 20.05 acres (eight parcels) of land generally located with frontage on Herndon Road and Grandale Drive, south of

Barbee Road (see Attachment 1, Context Map) from Residential Rural (RR) to Planned Development Residential 3.322 (PDR 3.322)(18.91 acres) and RR(D) (1.14 acres) for a single-family residential development of 54 units. This request is consistent with the future land use designation of the *Comprehensive Plan* which designates this site as Low Density Residential (4 DU/Ac. or less).

Appendix A provides supporting information.

## **B. Site History**

There are no recent zoning map change requests associated with this site.

## **C. Review Requirements**

Planning staff has performed a sufficiency review for this Zoning Map Change request (reference UDO Sec. 3.2.4, Application Requirements [general] and 3.5.5, Application Requirements [for a Zoning Map Change]). This staff report presents the staff findings per Sec. 3.5.8, Action by the Planning Director, on the request's consistency with the Unified Development Ordinance and applicable adopted plans.

This review is based primarily on compliance with any applicable laws, plans, or adopted policies of the City Council. Any issues or concerns raised in this report are based on best professional planning practice unless they have a basis in adopted plans, policies, and/or laws.

## **D. Unified Development Ordinance (UDO) Compliance**

This request is consistent with the requirements of the Unified Development Ordinance. The associated development plan (see Attachment 4, Development Plan reduction) provides the required elements for zoning map change requests in the PDR and RR district (Sec. 3.5.6.D, Sec. 6.2.1, and Sec. 6.11.3). In addition, commitments in excess of UDO requirements have been made (see Appendix D for supporting information):

**Text Commitments.** Text commitments have been proffered to commit to requirements in excess of ordinance standards. The applicant has committed that the PDR portion of the site be limited to single family residential (and accessory) uses, improvements for site access, and construction of bicycle facilities (limited to the area of other roadway improvements). While the applicant meets the UDO requirement to provide bicycle facility improvements within the extent of roadway improvements and exceeds the UDO requirement by also providing improvements adjacent to the taper lengths, Transportation requested that the improvements related to bicycle facilities be provided for the full extent of the frontage along Grandale Drive.

**Graphic Commitments.** Graphic commitments include the general location of site access points and location of tree preservation and replacement areas.

**Determination.** The requested PDR and RR zoning districts and associated development plan meets or exceeds the applicable requirements of the UDO. If this zoning map change

request is approved, the attached development plan (Attachment 5C) establishes the level of development allowed on the property.

## E. Adopted Plans

A zoning map change request must be consistent with the *Comprehensive Plan*. As such, other adopted plans have been included by reference in this document. Table E, Adopted Plans, in Appendix E identifies the applicable policies of the *Comprehensive Plan* and other adopted plans included by reference.

**Determination.** The requested zoning districts and associated development plan is consistent with the Future Land Use Map and other policies of the *Comprehensive Plan*.

Conditions in other adopted plans have been identified (see Appendix E, Table E):

**Long Range Bicycle Plan Map 4.6.** A proposed bicycle lane along Herndon Road and Grandale Drive are shown as a recommendations of the Long Range Bicycle Plan Map 4.6. The applicant has proffered right-of-way dedication and to construct a minimum of four feet of additional asphalt widening along the areas proposed for other roadway improvements (see Text Commitment #6 in D5, Summary of Development Plan and Attachment 4). This commitment exceeds the UDO requirement because it provides the bicycle facility adjacent to the taper lengths for the turn-lane improvements, but is less than what was requested by Transportation, who requested the asphalt widening for the full frontage of the site.

## F. Site Conditions and Context

**Site Conditions.** The 20.05-acre site is located with frontage along Herndon Road and Grandale Drive, south of Barbee Road; the majority of the frontage is along Grandale Drive extending approximately ¼ mile south of Barbee Road. There are three existing structures on the site; two barns that front along Herndon Road and one residential structure located at 4314 Grandale Drive (intersection of Grandale Drive and Amanda Road). An intermittent stream and a portion of a farm pond are present on the southern portion of the site. The eastern portion of the site is forested and the western portions of the site have most recently been used for agricultural purposes.

**Area Characteristics.** The site is in the Suburban Tier within one mile of Interstate 40 and a regional commercial center (known as Southpoint). Over the last few decades the area has experienced a transition from larger-lot rural uses to larger suburban style housing developments, also spurred by national- and regional- level retail anchors. This general location provides easy access to the greater Triangle area. The surrounding zoning districts include RR, Residential Suburban – 10 (RS-10), OI, and PDR 2.150.

Appendix F provides a summary of the uses and zoning in the more immediate vicinity of the subject site.

**Determination.** The proposed PDR and RR districts and associated development plan meets the ordinance requirements for development on the subject site. Approval of 54 single-family lots is similar in density and housing type to more recent development to the north, east and south.

## G. Infrastructure

The impact of the requested change has been evaluated to suggest its potential impact on the transportation system, water and sewer systems, and schools. In each case, the impact of the change is evaluated based upon a change from the most intense development using the existing land use and zoning to the most intense use allowed under the request.

See Appendix G for additional information.

**Determination.** The proposed PDR and RR districts and associated development plan is consistent with *Comprehensive Plan* policies regarding the infrastructure impacts of road, transit, drainage/stormwater, and schools. The proposal is estimated to increase the traffic generation of the subject site by 310 daily trips, increase the students generated from the proposed use by nine students, and increase the estimated water demand of the site by 4,650 gallons per day. The existing infrastructure has available capacity to meet these increases.

In addition to the roadway improvements proffered by this applicant (case Z1300035) there is a proffered commitment by the 751 Assemblage project developers (case Z0800003) to construct a northbound right-turn lane on Barbee Road (onto Grandale Drive) with adequate storage and taper.

## H. Staff Analysis

Staff determines that this request is consistent with the *Comprehensive Plan* and applicable policies and ordinances. If the requested PDR and RR zoning designation were approved, the development plan would further establish the development potential of the proposed development.

## I. Contacts

Table I. Contacts		
<b>Staff Contact</b>		
Amy Wolff, Senior Planner	Ph: 919-560-4137, ext. 28235	Amy.Wolff@DurhamNC.gov
<b>Applicant Contact</b>		
Agent: Tony Tate, Tony M. Tate Landscape Architecture, PA	Ph: 919-484-8880	tony@tmtla.com

## J. Notification

Staff certifies that newspaper advertisements, letters to property owners within 600 feet of the site and the posting of a zoning sign on the property has been carried out in accordance with Section 3.2.5 of the UDO. In addition, the following neighborhood organizations were mailed notices:

- Inter-Neighborhood Council
- Fayetteville Street Planning Group
- Friends of Durham
- Unity in the Community for Progress
- Fairfield Community Awareness Committee
- Northeast Creek StreamWatch
- Partners Against Crime – District 4

## K. Summary of Planning Commission Meeting October, 2014 (Case Z1300035)

**Staff Report:** Ms. Wolff presented the staff report.

**Zoning Map Change Request** Residential Rural (RR) to Planned Development Residential 3.322 (PDR 3.322) and Residential Rural with a development plan (RR(D)).

**Public Hearing:** Chair Harris opened the public hearing. Four people signed up to speak, two people spoke in support and two people spoke in opposition. Chair Harris closed the public hearing.

**Commission Discussion:** Commissioners had a few concerns regarding the right of way and left turn lane. Some concerns were expressed with the developer adding sewer service and boundary buffer to Mr. McKissick's property without it being in the original plans.

**Motion:** Approval of Grandin Trace (Z1300035). (Padgett, Gibbs 2<sup>nd</sup>)

**Action:** Motion carried, 10-0

**Findings:** The Planning Commission finds that the ordinance request is consistent with the adopted Comprehensive Plan. The Commission believes the request is reasonable and in the public interest and recommends approval based on comments received at the public hearing and the information in the staff report.

## L. Supporting Information

Table K. Supporting Information		
Applicability of Supporting Information		
Appendix A	Application	Attachments: <ol style="list-style-type: none"> <li>1. Context Map</li> <li>2. Future Land Use Map</li> <li>3. Aerial Photography</li> <li>4. Development Plan Reduction</li> <li>5. Application</li> <li>6. Submittal and Review History</li> </ol>
Appendix B	Site History	N/A
Appendix C	Review Requirements	N/A
Appendix D	Unified Development Ordinance	Table D1: Designation Intent Table D2: District Requirements Table D3: Environmental Protection Table D4: Project Boundary Buffers Table D5: Summary of Development Plan
Appendix E	Adopted Plans	Table E: Adopted Plans
Appendix F	Site Conditions and Context	Table F: Site Context
Appendix G	Infrastructure	Table G1: Road Impacts Table G2: Transit Impacts Table G3: Utility Impacts Table G4: Drainage/Stormwater Impacts Table G5: School Impacts Table G6: Water Impacts
Appendix H	Staff Analysis	N/A
Appendix I	Contacts	N/A
Appendix J	Notification	N/A
Appendix K	Summary of Planning Commission Meeting	Attachments: <ol style="list-style-type: none"> <li>7. Planning Commissioner's Written Comments</li> <li>8. Ordinance Form</li> <li>9. Consistency Statement</li> </ol>

## Appendix A: Application Supporting Information

Attachments:

1. Context Map
2. Future Land Use Map
3. Aerial Photography
4. Development Plan Reduction
5. Application
6. Submittal and Review History

## Appendix D: Unified Development Plan Supporting Information

Table D1. UDO Designation Intent	
<b>PDR</b>	<b>Planned Development Residential</b> - the <b>PDR</b> district is established to allow for design flexibility in residential development. A development plan is required with a request for this district, which shows a conceptual representation of the proposed site that indicates how the ordinance standards could be met. Any significant change to the development plan would require a new zoning petition. While <b>PDR</b> is primarily a residential district, other uses may be allowed under limited provisions of the ordinance.
<b>RR</b>	<b>Residential Rural</b> – the <b>RR</b> district is established to provide for agricultural activities and residential development on lots of 30,000 square feet or greater and in conservation subdivisions. Commercial and industrial development is generally prohibited.
<b>D</b>	<b>Development Plan</b> – the letter “D” following a zoning district indicates that a development plan has been included with a zoning map change request. This designation may be added to any zoning map change request to signify that a conceptual representation of the proposed site has been submitted that indicates how the proposed development could meet ordinance standards. Any significant change to the development plan would require a new zoning petition.
<b>F/J-B</b>	<b>Falls/Jordan District B</b> – the purpose of the <b>F/J-B</b> Watershed Protection Overlay district is to preserve the quality of the region's drinking water supplies through application of the development standards intended to protect the environment. In general, water supply protection will be accomplished by establishing and maintaining low intensity land use and development on land near the region's water supply rivers and reservoirs. Where high density development is desired, water supply protection will be accomplished through the use of engineered stormwater controls. The overall objective is to: <ul style="list-style-type: none"><li>• Reduce the risk of pollution from stormwater running off of paved and other impervious surfaces; and</li><li>• Reduce the risk of discharges of hazardous and toxic materials into the natural drainage system tributary to drinking water supplies.</li></ul>

Table D2. District Requirements – PDR			
	Code Provision	Required	Committed
Minimum Site Area (acres)	6.11.3.B.1	4	18.91
Residential Density (maximum)	6.11.3.C	Specified on plan	3.322 (DU/Ac.)
Maximum Height (feet)	6.11.3.C.3	35	35
Minimum Street Yard (feet)	6.11.3.E.1	8	8

District Requirements – RR			
	Code Provision	Required	Proposed
Minimum Lot Area (square feet)	6.2.1.A.1	30,000	30,000*
Residential Density (maximum)	6.2.1.A.1	1.4 (DU/Ac.)	0.98 (DU/Ac.)
Maximum Height (feet)	6.2.1.A.1	35	35*
Minimum Street Yard (feet)	6.2.1.A.1	50	50*
Minimum Side Yard (feet)	6.2.1.A.1	12 each side 30 both sides total	12 each side* 30 both sides total*
Minimum Rear Yard (feet)	6.2.1.A.1	25	25*

\*Standards will be applied at the time of site plan or building permit.

Table D3. Environmental Protection			
Resource Feature	UDO Provision	Required	Committed
Tree Coverage	8.3.1C	16.32% (3.01 acres)	16.32% (3.01 acres)
Stream Protection (buffer in feet)	8.5.4.B	100	100



Table D4. Project Boundary Buffers			
Cardinal Direction	Adjacent Zone	Required Opacity	Proposed Opacity
North	RS-10	0/0	0/0
East	RR	N/A (right-of-way greater than 60 feet)	N/A
South	RR	0.2/0.2	0.2 (10 feet)
	PDR 2.150	0/0	0/0
West	RR	From RR: 0/0	0/0
		From PDR: N/A (right-of-way greater than 60 feet)	N/A

Table D5. Summary of Development Plan		
Components	Description	Development Plan Sheet
Required Information	<b>Intensity/Density.</b> 54 residential units total (53 in PDR 3.322, 1 in RR = 0.98 DU/Ac.)	D-2
	<b>Building/Parking Envelope</b> is not required of single-family development.	N/A
	<b>Project Boundary Buffers</b> are appropriately shown	D-2
	<b>Stream Crossing.</b> One potential stream crossing shown.	D-2
	<b>Access Points.</b> Two access points have been identified.	D-2
	<b>Dedications and Reservations.</b> See text commitments.	Cover, D-2
	<b>Impervious Area.</b> 35% = 6.81 acres	D-2
	<b>Environmental Features.</b> Intermittent stream and a portion of a farm pond have been identified.	D-1, D-2
	<b>Areas for Preservation.</b> None.	N/A
	<b>Tree Coverage.</b> 16.32% (3.01 acres) as shown.	D-2

<b>Graphic Commitments</b>	Location of tree preservation areas. Location of access points.	D-2
<b>Text Commitments</b>	<ol style="list-style-type: none"> <li>1. The PDR portion of the proposed development will be limited to single family residential and accessory uses.</li> <li>2. <u>Prior to the issuance of 30<sup>th</sup> certificate of occupancy:</u> Site Access #2 shall be constructed to public street standards from the western boundary of the PDR 3.22 zoning district to the western boundary of the RR(D) zoning district.</li> <li>3. <u>Prior to the issuance of any building permit:</u> dedicate an additional 10 feet of right-of-way for the frontage of the site along Grandale Drive and Herndon Road.</li> <li>4. <u>Prior to the issuance of any building permit:</u> the entire right-of-way for Amanda Road adjacent to the site must be legally closed.</li> <li>5. <u>Prior to the issuance of any certificate of occupancy:</u> Turn lane improvements will be provided on Grandale Drive and Huntsman Drive as determined by the City of Durham and NCDOT at the time of site plan submittal. The turn lane improvements may include a northbound left-turn lane, a southbound left-turn, and/or a southbound right-turn, each with adequate storage and appropriate tapers.</li> <li>6. <u>Prior to the issuance of any certificate of occupancy:</u> bicycle lane or facility: construct a minimum of four feet of additional asphalt (in addition to the proposed roadway improvements) along the frontage of the west side of Grandale Drive within improvement areas of (5.) above, to include storage and taper lengths.</li> </ol>	Cover
<b>SIA Commitments</b>	None provided	N/A

## Appendix E: Adopted Plans Supporting Information

Table E. Adopted Plans	
<i>Comprehensive Plan</i>	
Policy	Requirement
<b>Future Land Use Map</b>	<p><b>Low Density Residential:</b> Land used primarily for residential uses.</p> <p><b>Suburban Tier:</b> Land uses that shall be allowed include Recreation and Open Space, Agricultural, Residential, Institutional, Commercial, Office, Research/Research Application, and Industrial.</p>

<b>2.2.2a</b>	<b>Suburban Tier Development Focus:</b> Ensure that the Suburban Tier has sufficient land to accommodate anticipated population growth and its attendant demands for housing, employment, and goods and services, including opportunities for affordable housing and recreation.
<b>2.2.2b</b>	<b>Suburban Tier Land Uses:</b> Land uses that shall be allowed include Recreation and Open Space, Agricultural, Residential, Institutional, Commercial, Office, Research/Research Application, and Industrial.
<b>2.3.1a</b>	<b>Contiguous Development:</b> Support orderly development patterns that take advantage of the existing urban services, and avoid, insofar as possible, patterns of leapfrog, noncontiguous, scattered development within the Urban Growth Area.
<b>2.3.2a</b>	<b>Infrastructure Capacity.</b> Consider the impacts to the existing capacities of the transportation, water, and sewer systems, and other public facilities and services. Measure from the potential maximum impact of current policy or regulation to the potential maximum impact of the proposed change in policy or regulation.
<b>8.1.2i</b>	<b>Transportation Level of Service Maintenance:</b> Not recommend approval for any zoning map change which would result in the average daily trips exceeding 110% of the adopted level of service standards for any adjacent road, unless the impact on the adjacent roads is mitigated.
<b>8.1.4d</b>	<b>Development Review and the Adopted Bicycle Plans:</b> Review development proposals in relation to the 2006 Comprehensive Durham Bicycle Transportation Plan and the Bicycle Component of the most recent adopted Long Range Transportation Plan, and seek dedication or reservation of right-of-way or easements and construction of facilities in conformance with that Plan and Complete Street design standards.
<b>8.1.4p</b>	<b>New Bicycle Routes:</b> Wherever possible, incorporate recommended bike lanes or wide shoulders during street resurfacing or reconstruction and convert railroad corridors to bikeways.
<b>11.1.1a</b>	<b>School Level of Service Standard:</b> The level of service for public school facilities shall be established as a maximum enrollment of 110 percent of the system's maximum permanent building capacity, measured on a system-wide basis for each type of facility.
<b>11.1.1b</b>	<b>Adequate Schools Facilities:</b> Recommend denial of all Zoning Map amendments that proposed to allow an increase in projected student generation over that of the existing zoning that would cause schools of any type to exceed the level of service.
<b>Long Range Bicycle Plan</b>	
Map 4-6 shows a proposed bicycle lane along Herndon Road and Grandale Drive.	

## Appendix F: Site Conditions and Context Supporting Information

Table F. Site Context			
	Existing Uses	Zoning Districts	Overlays
<b>North</b>	Vacant, single-family residential	RS-10	F/J-B
<b>East</b>	Vacant, single-family residential	RR	F/J-B
<b>South</b>	Single-family residential	RR, PDR 2.150	F/J-B
<b>West</b>	Vacant, single-family residential, agriculture	RR	F/J-B

## Appendix G: Infrastructure Supporting Information

Table G1. Road Impacts			
Herndon Road, Grandale Drive, and Barbee Road are the major roads impacted by the proposed zoning change. NCDOT has proposed the construction of a roundabout at the Herndon Road and Barbee Road / Massey Chapel Road intersection. The project is currently in the right-of-way acquisition phase.			
Affected Segments	Herndon Road	Grandale Drive	Barbee Road
<b>Current Roadway Capacity (LOS D) (AADT)</b>	10,700	10,700	10,700
<b>Latest Traffic Volume (AADT)</b>	4,200	5,000	6,500
<b>Traffic Generated by Present Designation (average 24 hour)*</b>	280		
<b>Traffic Generated by Proposed Designation (average 24 hour)**</b>	590		
<b>Impact of Proposed Designation</b>	+310		

Source of LOS Capacity: FDOT Generalized Level of Service Volume Table 4-1 (2012)

Herndon Road, Grandale Drive, and Barbee Road: 2-lane undivided city/county class II arterial roadway without left-turn lanes

Source of Latest Traffic Volume: 2013 NCDOT Traffic Count Map

**\*Assumption- (Max Use of Existing Zoning)** – RR: 24 single-family lots

**\*\*Assumption- (Max Use of Existing Zoning)** – PDR 3.322, RR (D): 54 single-family lots

Table G2. Transit Impacts
Transit service is not provided within one-quarter mile of the site.

Table G3. Utility Impacts
This site will be served by City water and sewer.

**Table G4. Drainage/Stormwater Impacts**

The impacts of any change will be assessed at the time of site plan review. The subject site is of sufficient size and shape to accommodate appropriate stormwater facilities that may be required at this time.

**Table G5. School Impacts**

The proposed zoning is estimated to generate 18 students. This represents an increase of nine students over the existing zoning. Durham Public Schools serving the site are Creekside and Parkwood Elementary Schools, Lowes Grove Middle School, and Jordan and Hillside High Schools.

Students	Elementary School	Middle School	High School
<b>Current Building Capacity</b>	16,695	7,824	10,080
<b>Maximum Building Capacity (110% of Building Capacity)</b>	18,365	8,606	11,088
<b>20<sup>th</sup> Day Attendance (2011-12 School Year)</b>	16,579	7,465	9,737
<b>Committed to Date (July 2009 – June 2012)</b>	68	19	-35
<b>Available Capacity</b>	1,689	1,114	1,383
<b>Potential Students Generated – Current Zoning*</b>	4	2	3
<b>Potential Students Generated – Proposed Zoning**</b>	8	4	6
<b>Impact of Proposed Zoning</b>	+3	+2	+3

\*Assumption- (Max Use of Existing Zoning) – RR: 24 single-family lots

\*\*Assumption- (Max Use of Existing Zoning) – PDR 3.322, RR (D): 54 single-family lots

**Table G6. Water Supply Impacts**

This site is estimated to generate a total of 8,370 GPD if developed to its maximum potential with the proposed zoning district. This represents an increase of 4,650 GPD over the existing zoning district.

<b>Current Water Supply Capacity</b>	37.00 MGD
<b>Present Usage</b>	28.37 MGD
<b>Approved Zoning Map Changes (July 2011 – June 2014)</b>	0.14 MGD
<b>Available Capacity</b>	8.49MGD
<b>Estimated Water Demand Under Present Zoning*</b>	3,720 GPD
<b>Potential Water Demand Under Proposed Zoning**</b>	8,370 GPD
<b>Potential Impact of Zoning Map Change</b>	+4,650

Notes: MGD = Million gallons per day

\*Assumption- (Max Use of Existing Zoning) – RR: 24 single-family lots

\*\*Assumption- (Max Use of Existing Zoning) – PDR 3.322, RR (D): 54 single-family lots

## **Appendix K: Summary of Planning Commission Meeting**

Attachments:

7. Planning Commissioner's Written Comments
8. Ordinance Form
9. Consistency Statement